



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Dallan W. Quass et al.

Application No.: 09/771,008

Filed: January 26, 2001

For: METHOD FOR LEARNING AND  
COMBINING GLOBAL AND LOCAL  
REGULARITIES FOR INFORMATION  
EXTRACTION AND CLASSIFICATION

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Examiner: Michael B. Holms

Art Unit: 2121

INFORMATION DISCLOSURE STATEMENT  
UNDER 37 CFR §1.97 and §1.98

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Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR §1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

This IDS is being filed before the mailing date of the final Office Action or Notice of Allowance.

Please charge the IDS fee of \$180 to Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

03/08/2004 SMINASS1 00000091 201430 09771008

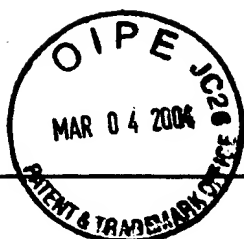
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Respectfully submitted,

Kenneth R. Allen  
Reg. No. 27,301

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KRA:rmh

60148164 v1



PTO/SB/08A (08-03)

|   |      |                          |                  |
|---|------|--------------------------|------------------|
| <b>Substitute for form 1449A/PTO</b><br><br><b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br><br>(use as many sheets as necessary) |      | <b>Complete if Known</b> |                  |
|   |      | Application Number       | 09/771,008       |
|   |      | Filing Date              | January 26, 2001 |
|   |      | First Named Inventor     | Dallan W. Quass  |
|   |      | Art Unit                 | 2121             |
|   |      | Examiner Name            | Michael B. Holms |
| Sheet 1   | of 2 | Attorney Docket Number   | 021810-000100US  |

| U.S. PATENT DOCUMENTS+ |                          |  |                                |  |   |
|------------------------|--------------------------|--|--------------------------------|--|---|
| Examiner<br>Initials*  | Cite<br>No. <sup>1</sup> | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|                        |                          | Number Kind Code <sup>2</sup> (if known) |                                |  |   |
|                        | 1                        | US-6,233,575                             | 05-15-2001                     | Agrawal et al.                                     |   |
|                        | 2                        | US-6,161,130                             | 12-12-2000                     | Horvitz et al.                                     |   |
|                        | 3                        | US-5,930,803                             | 07-27-1999                     | Becker et al.                                      |   |
|                        |                          |  |                                |  |   |
|                        |                          |  |                                |  |   |
|                        |                          |  |                                |  |   |

| FOREIGN PATENT DOCUMENTS |                          |                           |                     |                                   |                                |   |  |                |
|--------------------------|--------------------------|---------------------------|---------------------|-----------------------------------|--------------------------------|---|--|----------------|
| Examiner<br>Initials*    | Cite<br>No. <sup>1</sup> | Foreign Patent Document   |                     |                                   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited<br>Document | Pages, Columns, Lines,<br>Where Relevant<br>Passages or Relevant<br>Figures Appear | T <sup>6</sup> |
|                          |                          | Country Code <sup>3</sup> | Number <sup>4</sup> | Kind Code <sup>5</sup> (if known) |                                |   |  |                |
|                          |                          |                           |                     |                                   |                                |   |  |                |
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| Examiner<br>Signature |  | Date<br>Considered |  |
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60148164 v1



Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 2 of 2

**Complete if Known**

|                        |                  |
|------------------------|------------------|
| Application Number     | 09/771,008       |
| Filing Date            | January 26, 2001 |
| First Named Inventor   | Dallan W. Quass  |
| Art Unit               | 2121             |
| Examiner Name          | Michael B. Holms |
| Attorney Docket Number | 021810-000100US  |

**NON PATENT LITERATURE DOCUMENTS**

| Examiner<br>Initials * | Cite<br>No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item<br>(book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s),<br>publisher, city and/or country where published.   | T <sup>2</sup> |
|------------------------|--------------------------|---|----------------|
|                        | 4 ✓                      | AGICHITIEN et al. "Snowball: Extracting Relations from Large Plain-Text Collections," Proceedings of the fifth ACM conference on Digital libraries, pp. 85 - 94 (2000).   |                |
|                        | 5 ✓                      | BRIN "Extracting Patterns and Relations from the World Wide Web," The Proceedings of the 1998 International Workshop on the Web and Databases, pp. 172 - 183 (1998).  |                |
|                        | 6 ✓                      | CHEN et al. "Data Mining: An Overview from a Database Perspective," IEEE Transactions on Knowledge and Data Engineering 8:866-883 (1996).   |                |
|                        | 7 ✓                      | COHEN "Recognizing Structure in Web Pages using Similarity Queries," Proceedings of the sixteenth national conference on artificial intelligence and eleventh innovation applications of AI conference on Artificial intelligence and innovative applications of artificial intelligence, pp. 59 - 66 (1999).                             |                |
|                        | 8 ✓                      | COLLINS et al. "Unsupervised Models for Named Entity Classification," Proceedings of the Joint SIGDAT Conference on Empirical Methods in Natural Language Processing and Very Large Corpora, pp. 189-196 (1999).  |                |
|                        | 9 ✓                      | COOLEY et al. "Grouping Web Page References into Transactions for Mining World Wide Web Browsing Patterns," Proceedings of the 1997 IEEE Knowledge and Data Engineering Exchange Workshop (KDEX '97), pp. 2-9 (1997).   |                |
|                        | 10 ✓                     | GAROFALAKIS et al "Data Mining and the Web: Past, Present and Future," Proceedings of the ACM CIKM'99 2nd Workshop on Web Information and Data Management (WIDM'99), pp 43-47 (1999).   |                |
|                        | 11 ✓                     | KAWANO "Mondou: Web search engine with textual data mining," Proceedings of the IEEE Pacific Rim Conference on Communications, Computers and Signal Processing, pp.402-405 (1997).  |                |
|                        | 12 ✓                     | LIN et al. "Extracting Classification Knowledge of Internet Documents with Mining Term Associations: A Semantic Approach," Proceedings of the 21st annual international ACM SIGIR conference on Research and development in information retrieval, pp. 241 - 249 (1998).  |                |
|                        | 13 ✓                     | NIGAM et al."Learning to Classify Text from Labeled and Unlabeled Documents," The Proceedings of the Fifteenth National Conference on Artificial Intelligence, pp. 792 - 799 (1998).  |                |
|                        | 14 ✓                     | RILOFF et al. "Learning Dictionaries for Information Extraction by Multi-level Bootstrapping," Proceedings of the sixteenth national conference on artificial intelligence and eleventh innovation applications of AI conference on Artificial intelligence and innovative applications of artificial intelligence, pp. 474 - 479 (1999). |                |
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| Examiner<br>Signature |  | Date<br>Considered |  |
|-----------------------|--|--------------------|--|

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<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



#5 2121  
3-10-04 PTO/SB/21 (08-03) 1/6

|  |                        |                  |
|--|------------------------|------------------|
| <b>TRANSMITTAL FORM</b><br><i>(to be used for all correspondence after initial filing)</i> | Application Number     | 09/771,008       |
|  | Filing Date            | January 26, 2001 |
|  | First Named Inventor   | Dallan W. Quass  |
|  | Art Unit               | 2121             |
|  | Examiner Name          | Michael B. Holms |
| Total Number of Pages in This Submission   | Attorney Docket Number | 021810-000100US  |

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| ENCLOSURES (Check all that apply)   |  |  |
|---|--|--|
| <input checked="" type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><input type="checkbox"/> Amendment/Reply<br><input type="checkbox"/> After-Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input checked="" type="checkbox"/> Information Disclosure Statement<br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Response to Missing Parts/Incomplete Application<br><input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) | <input type="checkbox"/> After Allowance Communication to Group<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):<br>USPTO forms SB08A and SB08B (two pages), copies of 14 cited references, Return Postcard |
| Remarks   |  | The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.   |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT |  |  |
|--|--|--|
| Firm or Individual                         | Townsend and Townsend and Crew LLP<br>Kenneth R. Allen Reg. No. 27,301 |  |
| Signature                                  | <i>Kenneth R. Allen</i>  |  |
| Date                                       | 3/1/04   |  |

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| I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. |                    |      |        |
| Typed or printed name   | Roger Hylton       |      |        |
| Signature   | <i>[Signature]</i> | Date | 3/1/04 |

# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 180

## Complete if Known

Application Number 09/771,008  
 Filing Date January 26, 2001  
 First Named Inventor Dallan W. Quass  
 Examiner Name Michael B. Holms  
 Art Unit 2121  
 Attorney Docket No. 021810-000100US

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## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:
Deposit  
Account  
Number

20-1430

Deposit  
Account  
Name

Townsend and Townsend and Crew LLP

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) or any underpayment of fee(s)

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## FEE CALCULATION

## 1. BASIC FILING FEE

| Large Entity |          | Small Entity |          | Fee Description        | Fee Paid |
|--------------|----------|--------------|----------|------------------------|----------|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |                        |          |
| 1001         | 770      | 2001         | 385      | Utility filing fee     |          |
| 1002         | 340      | 2002         | 170      | Design filing fee      |          |
| 1003         | 530      | 2003         | 265      | Plant filing fee       |          |
| 1004         | 770      | 2004         | 385      | Reissue filing fee     |          |
| 1005         | 160      | 2005         | 80       | Provisional filing fee |          |

SUBTOTAL (1)

(\$)

## 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

|                    |  | Extra Claims |  | Fee from below |  | Fee Paid |
|--------------------|--|--------------|--|----------------|--|----------|
| Total Claims       |  |              |  |                |  |          |
| Independent Claims |  |              |  |                |  |          |
| Multiple Dependent |  |              |  |                |  |          |

| Large Entity |          | Small Entity |          | Fee Description  |
|--------------|----------|--------------|----------|--|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |  |
| 1202         | 18       | 2202         | 9        | Claims in excess of 20                                     |
| 1201         | 86       | 2201         | 43       | Independent claims in excess of 3                          |
| 1203         | 290      | 2203         | 145      | Multiple dependent claim, if not paid                      |
| 1204         | 86       | 2204         | 43       | ** Reissue independent claims over original patent         |
| 1205         | 18       | 2205         | 9        | ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2)

(\$)

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

## 3. ADDITIONAL FEES

| Large Entity |          | Small Entity |          | Fee Description  | Fee Paid |
|--------------|----------|--------------|----------|--|----------|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |  |          |
| 1051         | 130      | 2051         | 65       | Surcharge - late filing fee or oath  |          |
| 1052         | 50       | 2052         | 25       | Surcharge - late provisional filing fee or cover sheet.                    |          |
| 1053         | 130      | 1053         | 130      | Non-English specification  |          |
| 1812         | 2,520    | 1812         | 2,520    | For filing a request for reexamination                                     |          |
| 1804         | 920*     | 1804         | 920*     | Requesting publication of SIR prior to Examiner action                     |          |
| 1805         | 1,840*   | 1805         | 1,840*   | Requesting publication of SIR after Examiner action                        |          |
| 1251         | 110      | 2251         | 55       | Extension for reply within first month                                     |          |
| 1252         | 420      | 2252         | 210      | Extension for reply within second month                                    |          |
| 1253         | 950      | 2253         | 475      | Extension for reply within third month                                     |          |
| 1254         | 1,480    | 2254         | 740      | Extension for reply within fourth month                                    |          |
| 1255         | 2,010    | 2255         | 1,005    | Extension for reply within fifth month                                     |          |
| 1401         | 330      | 2401         | 165      | Notice of Appeal   |          |
| 1402         | 330      | 2402         | 165      | Filing a brief in support of an appeal                                     |          |
| 1403         | 290      | 2403         | 145      | Request for oral hearing   |          |
| 1451         | 1,510    | 1451         | 1,510    | Petition to institute a public use proceeding                              |          |
| 1452         | 110      | 2452         | 55       | Petition to revive - unavoidable   |          |
| 1453         | 1,330    | 2453         | 665      | Petition to revive - unintentional   |          |
| 1501         | 1,330    | 2501         | 665      | Utility issue fee (or reissue)   |          |
| 1502         | 480      | 2502         | 240      | Design issue fee   |          |
| 1503         | 640      | 2503         | 320      | Plant issue fee  |          |
| 1460         | 130      | 1460         | 130      | Petitions to the Commissioner  |          |
| 1807         | 50       | 1807         | 50       | Petitions related to provisional applications                              |          |
| 1806         | 180      | 1806         | 180      | Submission of Information Disclosure Stmt                                  | 180      |
| 8021         | 40       | 8021         | 40       | Recording each patent assignment per property (times number of properties) |          |
| 1809         | 770      | 2809         | 385      | Filing a submission after final rejection (37 CFR § 1.129(a))              |          |
| 1810         | 770      | 2810         | 385      | For each additional invention to be examined (37 CFR § 1.129(b))           |          |
| 1801         | 770      | 2801         | 385      | Request for Continued Examination (RCE)                                    |          |
| 1802         | 900      | 1802         | 900      | Request for expedited examination of a design application                  |          |

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid SUBTOTAL (3)

(\$180)

## SUBMITTED BY

## Complete (if applicable)

Name (Print/Type) Kenneth R. Allen

Registration No. (Attorney/Agent)

27,301

Telephone

650-326-2400

Signature

Kenneth R. Allen

Date

3/1/04

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